



Models

SG-TTW-09ESE-26

SG-TTW-09HC-26

SG-TTW-12HC-26

SG-TTW-12ESEZ-26

Electronic Through the Wall Air Conditioner **Operating Instructions**



Contents

IMPORTANT NOTE TO THE OWNER	1
IMPORTANT NOTE TO THE SERVICER	1
Unit Features	1
Transportation Damage	1
Unpacking The Unit	1
Operating Instructions	1
Installation Instructions	2
Wiring	5
Air Conditioner Features	
Additional Things You Should Know	13
Normal Operating Sounds and Conditions	13
Obtaining Service	13
Warrantv	14



WARNING -

HIGH VOLTAGE!

Disconnect ALL power before servicing or installing. Multiple power sources may be present. Failure to do so may cause property damage, personal injury, or death.



RECOGNIZE THIS SYMBOL AS A SAFETY PRECAUTION.

ATTENTION INSTALLING PERSONNEL

As a professional installer you have an obligation to know the product better than the customer. This includes all safety precautions and related items.

Prior to actual installation, thoroughly familiarize yourself with this Instruction Manual. Pay special attention to all safety warnings. Often during installation or repair it is possible to place yourself in a position which is more hazardous than when the unit is in operation.

Remember, it is your responsibility to install the product safely and to know it well enough to be able to instruct a customer in its safe use.

Safety is a matter of common sense...a matter of thinking before acting. Most dealers have a list of specific good safety practices...follow them.

The precautions listed in this Installation Manual are intended as supplemental to existing practices. However, if there is a direct conflict between existing practices and the content of this manual, the precautions listed here take precedence.

Specifications

- Noise level is measured at a distance of 3.28ft away from the front of the unit in cooling mode.
- Power consumption is measured when the fan runs at the highest speed settings.
- These specifications are for reference only. For actual data, please refer to the rating label on the unit.

Model Number	SG-TTW-09ESE-26	SG-TTW-09HC-26	SG-TTW-12ESEZ-26	SG-TTW-12HC-26
Power Supply (Ph/V/Hz)	1/115/60	1/230-208/60	1/115/60	1/230-208/60
Dehumidifying Capacity (Pt/Day)	60	60	81.6	81.6
Rated Cooling Capacity (BTU/Hr)	9,200	9,200/8,900	11,800	11,800/11,400
Rated heating Capacity (BTU/Hr)	N/A	11,000/9,000	N/A	11,000/9,000
Cooing Power Input (Watt)	940	940/910	1,260	1,200/1,160
Heating Power Input (Watt)	N/A	3,500/2,900	N/A	3,500/2,900
Rated Current Cooing (Amperage)	8.6	4.4/4.7	11.6	5.6/6.0
Rated Current Heating (Amperage)	N/A	15/14	N/A	15/14
EER	9.8	9.8	9.4	9.8
Air Flow (CFM)	283/259/236	271/247/224	283/259/236	271/247/224
Noise Level Indoor/Outdoor [dB(A)]	56/64	56/66	56/64	56/64
Product Dimensions WxDxH (Inch)	26" x 21.125" x 15.625"			
Product Weight (Lb)	75	77	77	79
Refrigerant	R-410A	R-410A	R-410A	R-410A
Energy Star	Yes	No	Yes	No

IMPORTANT NOTE TO THE OWNER

This equipment is to be serviced by professionally trained personnel only. If this equipment is improperly installed, adjusted or altered by an unqualified person, a safety hazard may result.

IMPORTANT NOTE TO THE SERVICER

Read this manual and familiarize yourself with the specific items which must be adhered to before attempting to service this unit. The precautions listed in this manual should not supersede existing practices but should be considered as supplemental information.

Transportation Damage

All units are securely packed in shipping containers approved by the National Safe Transit AssociationThe carton should be checked upon arrival for external damage. If damage is found, immediately make a written request for inspection by the carrier's agent.

In the event of damage:

- 1. Note on the delivery receipt any visible damage to shipment or container.
- 2. Notify carrier promptly and request an inspection.
- 3. File the claim with the following supporting documents within the six month statute of limitations.
 - a. Original Bill of Lading, certified copy, or indemnity bond.
 - b. Original paid freight bill or indemnity.
 - Original invoice or certified copy, showing trade and other discounts or reductions.
 - d. Copy of the inspection report issued by carrier's representative at the time damage is reported to the carrier.

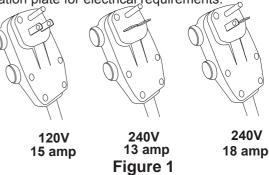
The carrier is responsible for making prompt inspection of damage and for a thorough investigation of each claim he distributor or manufacturer will not accept claims from dealers for transportation damage.

Unpacking The Unit

- 1. Cut the carton banding and open the carton.
- 2. Remove the literature, hardware pack, upper styrofoam shipping blocks, and styrofoam corner posts.
- 3. Remove the front assembly.
- 4. Lift the unit from the remaining carton.
- 5. Dispose of the cardboard and styrofoam at an approved Recycle Center. Check all contents for damaged or missing parts. In case of concealed damage, notify the carrier as soon as possible—preferably within 5 days. Refer to step 3 of the Aransportation Damage section if damage or missing parts are noted.

Operating Instructions

Check the data specification plate and ensure the proper voltage and current rating for the type of power plug on the unit is available. DO NOT REMOVE THE GROUNDING PRONG FROM THE POWER CORDSee Figure 1 for the types of acceptable plugs. Do not use an extension cord for the installation of this product. Refer to the data specification plate for electrical requirements.



 LCDI or AFCI Power Cords - Underwrites Laboratories and the National Electric Code (NEC) now require power cords that sense current leakage and can open the electrical circuit to the unit on units rated at 250 volts or less. In the event that unit does not operate, check the reset button located on or near the head of the power cord as part of the normal troubleshooting procedure.



LCDI power Cord

VOLTAGE MEASUREMENTS

Before connecting the unit, measure the supply voltage. Voltage must fall within the voltage utilization range given in Table 1.

Operating Voltage					
Unit Voltage	Voltage Utilization Range				
Rating	Minimum	Maximum			
230/208	187	253			
115	103	126			

Table 1
Operating Voltage



To prevent electrical shock, property damage, personal injury, or death, do not remove grounding prong from plug. Follow all operating instructions.

Installation Instructions

To ensure that the unit operates safely and efficiently, it must be installed, operated, and maintained according to these installation and operating instructions and all local codes and ordinances, or, in their absence, with the latest edition of the National Electrical CodeThe proper installation of this unit is described in the following sections. Following the steps in the order presented should ensure proper installation.

SLEEVE INSTALLATION

the sleeve must be installed properly:

- Level from right to left.
- A slight downward pitch from the indoor side to the outdoor side as shown in Figure 3.

Refer to the Installation Instructions supplied with the wall sleeve for a complete description of the installation proce-

NOTE: Wall sleeve (PBWS01A) is not shipped with chassis and must be purchased separately.

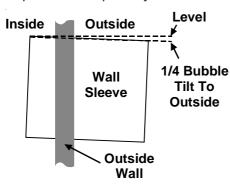


Figure 2

CHASSIS INSTALLATION

1. Remove front grille. See Figure A.

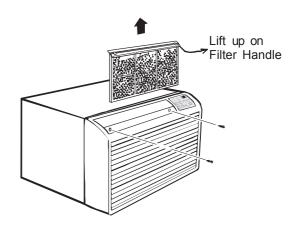
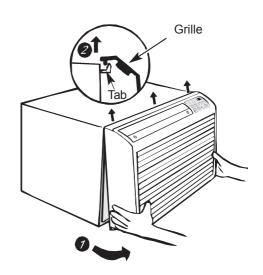


Figure A

The front grille can be removed for more thorough cleaning or to make the model and serial numbers accessible. To In order for condensate water to drain properly inside the unit, remove, pull the filter out and remove the two grille screws



Pull the grille out from the bottom and lift up from the tabs on the top of the case.

2. Remove the grounding screw and wire next to the grounding symbol on right side of chassis control panel (Figure 3). Attach other end of ground wire to the hole in the bottom right side of the sleeve with #8 x 3/8" blunt point sheet metal screw. The hole on the sleeve is indicated by grounding symbol on the sleeve. Slide chassis part of the way into the sleeve and reattach the ground wire back to the hole on the right side on the control panel area next to the grounding symbol.

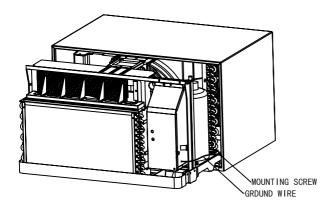


Figure 3

3. Remove shipping pads inside air conditioner next to compressor. (See Figure B.)

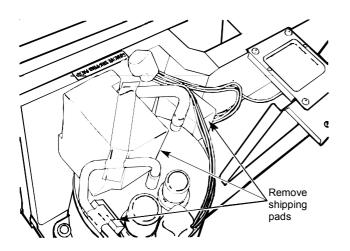


Figure B

- 4. Carefully slide the chassis into the sleeve. Ensure that the ground wire is not pinched or in the path of the condenser fan.
- 5. Loosen locking plate screw and rotate tab with tab behind wall case flange (See Figure C) then tighten locking plate screw.

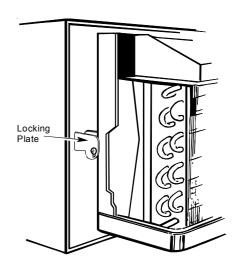


Figure C

6. If outlet is on the left side of the unit. route power cord as shown in Figure D.

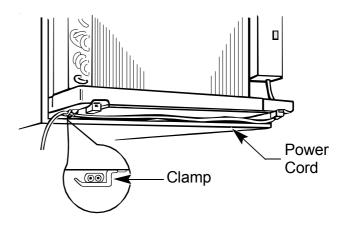
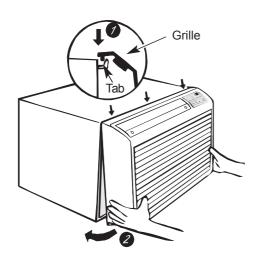


Figure D

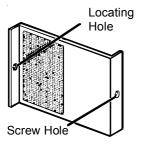
To replace front grille:



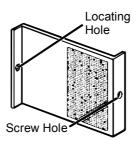
Hook the tabs on the front grille even with the tabs on the case and snap into place. Replace the screws and filter. Refer to Page 4, Figure A.

VENT CONTROL AND AIR DIRECTION (See Figure E)

The vent control is located behind the front grille on the right side of the air discharge area. When set at CLOSE only the air inside the room will be circulated and conditioned. When set at **OPEN**, some inside air is exhausted outside.



OPEN position (Mesh end toward back)



CLOSE position (Mesh end toward front)

Figure E

To open or close the vent:

- 1. Remove the front grille.
- 2. Remove the vent card screw.
- 3. Remove the vent card, turn it over and replace it by locating rear hole in card over locating pin inside air discharge and reattaching screw at front.

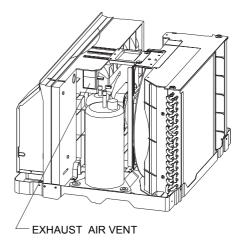
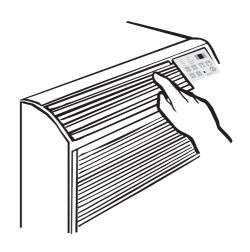


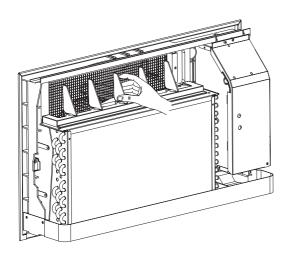
Figure 4

AIR DIRECTION:

Horizontal louvers on the front grille let you control the air direction up and down.



Remove the front grille to adjust the vertical louvers side-toside to direct the air left or right.



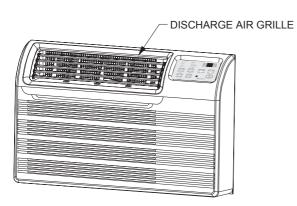


Figure 5

IMPORTANT NOTES:

- The unit is equipped with a rubber-grommet-mounted compressor. These grommets are factory set and require no adjustment.
- 2. Obstruction to air flow must be checked and removed. Check the indoor and outdoor grilles for obstructions. The unit must be located where curtains, furniture, trees, or other objects do not block air flow to and from the unit. If air is obstructed and/or deflected back into the unit, the air conditioner's compressor may cycle on and off rapidly. This could cause damage to the compressor.

Wiring

Before wiring the unit, please review the following warnings and cautions.



WARNING -

To avoid the risk of electrical shock, personal injury or death, do not service this unit without first opening all disconnects and/or removing the unit cord set plug from the wall outlet.



_WARNING-

To avoid the risk of electrical shock, personal injury, or property damage, do not use an extension cord with this unit.



WARNING

To avoid the risk of fire, property damage, or personal injury, use only copper conductors.



WARNING

To avoid the risk of personal injury, wiring to the unit must be properly polarized and grounded.



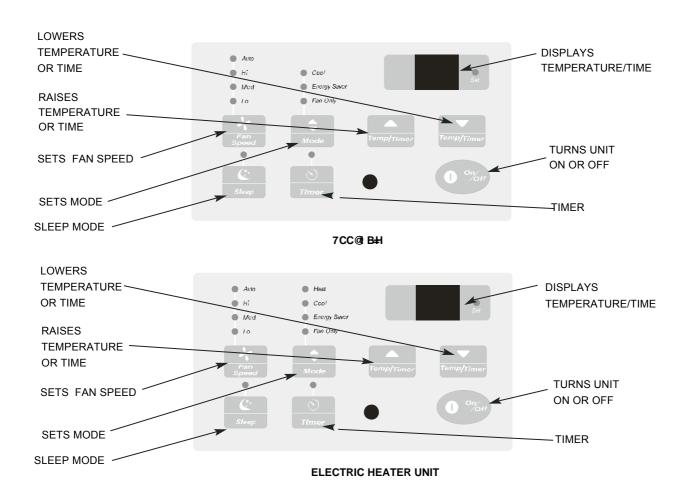
WARNING —

This air conditioner is not meant to provide unattended cooling or life support for persons or animals who are unable to react to the failure of this product.

The failure of an unattended air conditioner may result in extreme heat in the conditioned space causing overheating or death of persons or animals. Take proper precautions to avoid unattended operation.

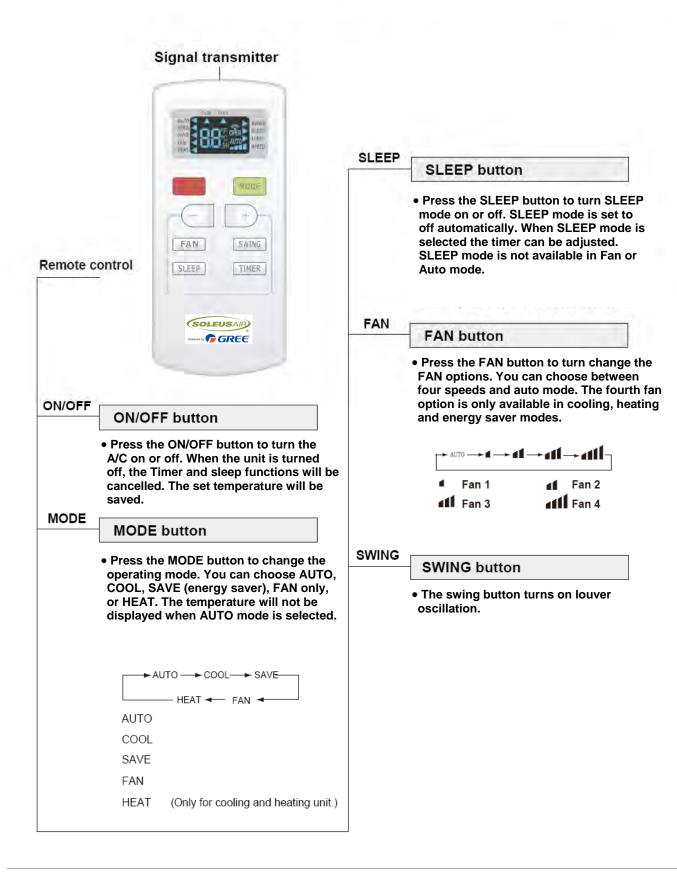
ELECTRONIC CONTROL OPERATING INSTRUCTIONS

Before you begin, thoroughly familiarize yourself with the control panel and remote as shown below and all its functions. Then follow the symbol for the functions you desire. The unit can be controlled by the touch pad alone or with the remote.



OPERATING THE REMOTE CONTROL

NOTE: Make sure there are no obstructions between the receiver on the A/C and the remote control. Do not drop or throw the remote control. Do not allow water to get inside the remote control and do not place the remote control in direct sunlight or a place where it is very hot.



OPERATING THE REMOTE CONTROL



+ button

• Press the "+" button to increase the temperature when the unit is on. Press and hold the "+" button for more than 2 seconds to quickly cycle through the temperature options. Stop pressing the button when the desired temperature is displayed. The temperature cannot be set in auto mode. Temperature range: 61°F - 86°F.

- button

• Press the "-" button to decrease the temperature when the unit is on. Press and hold the "-" button for more than 2 seconds to quickly cycle through the temperature options. Stop pressing the button when the desired temperature is displayed. The temperature cannot be set in auto mode. Temperature range: 61°F - 86°F.

TIMER

TIMER button

- Press the TIMER button when the unit is off to set up the Auto-on timer. The Auto-on time can be set between .5 24 hours. The icons "T-ON" and "H" will flash for 5 seconds. Start selecting the time using the "+" and "-" buttons before the icons stop flashing. The time will increase/decrease in .5 hour increments with each press of the "+" or "-" buttons. To cancel the Auto-on time, manually press the ON/OFF button to turn the unit on.
- Press the TIMER button when the unit is on to set up the Auto-off timer. The Auto-off time can be set between .5 24 hours. The icons "T-OFF" and "H" will flash for 5 seconds. Start selecting the time using the "+" and "-" buttons before the icons stop flashing. The time will increase/decrease in .5 hour increments with each press of the "+" or "-" buttons. To cancel the Auto-off time, manual press the ON/OFF button to turn the unit off.
- Once the Auto-on or Auto-off time is set, the "T-On" or "T-Off" and "H" will blink for 2 seconds. After 2 seconds the set temperature will be displayed.

Guide for operation- General operation

- 1. To power on the unit, press the ON/OFF button. The unit will start to run. (Note: When it is powered off, the louvers will close automatically.)
- 2. Press MODE button, select desired running mode, or press COOL or HEAT mode to enter into the corresponding operation directly.
- 3. Press the + or button to set the desired temperature. (It is unnecessary to set the temp. in AUTO mode.)
- 4. Press the FAN button to set fan speed. Select AUTO, FAN 1, FAN 2, FAN 3 or FAN 4.
- 5. Press the SWING button to select the swing function.

Guide for operation- Optional operation

- 1. Press SLEEP button, to set sleep.
- 2. Press TIMER button, to set the scheduled timer on or timer off.

Introduction for special function

★ About AUTO RUN

When AUTO RUN mode is selected, the set temperature will not be displayed on the LCD. The unit will display the room temperature and automatically select the operating mode based on the current room temperature.

★ About LOCK

When the unit is on or off, hold "+" and "-" key simultaneously to lock and unlock the keypad. When locked, the display will show the LOCK icon, in which case the lock icon will flash three times when a key is pressed. After the keypad is unlocked, the lock icon on the display will disappear. When the unit is on, the default is unlock.

★ About switch between Fahrenheit and Centigrade

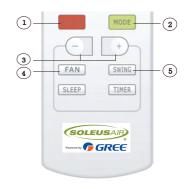
When the unit is off, hold "-" and "MODE" keys simultaneously to switch between $^\circ\! C$ and $^\circ\! F$.

Changing batteries and notices

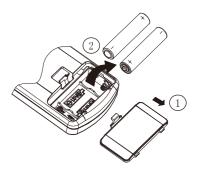
- 2. Take out the old batteries. (As show in figure)
- Insert two new AAA batteries, and pay attention to the polarity. (As shown in figure)
- 4. Attach the back cover of the remote control. (As show in figure)

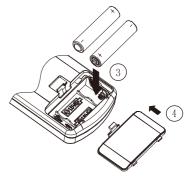
⋆ NOTE:

- When changing the batteries, do not use old or different batteries, otherwise, it can cause the remote control to malfunction.
- If the wireless remote control will not be used for a long time, please remove the batteries to prevent leakage that could damage the remote control.
- The operation should be in its receiving range.
- It should be placed at where is 1m away from the TV set or stereo sound sets.
- If the remote control is not operating normally, remove the batteries and reinsert after 30 seconds. Replace the batteries if the remote is not responsive.



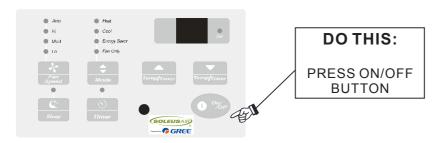






Air Conditioner Features (continued)

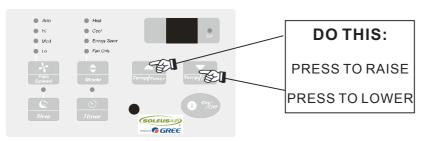
TO TURN UNIT ON:



YOU WILL SEE:



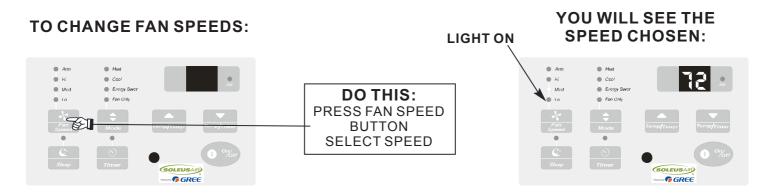
TO CHANGE TEMPERATURE SETTING:

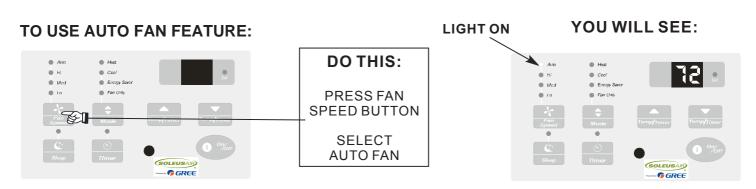


YOU WILL SEE:



Note: Tap or hold either $up(^{\land})$ or down(v) button until the desired temperature is seen on display. This temperature will be automatically maintained anywhere between 61F (16°C) and 86F (30°C) for both cooling and heating modes. If you want the display to read the actual room temperature, select the Fan Only mode.

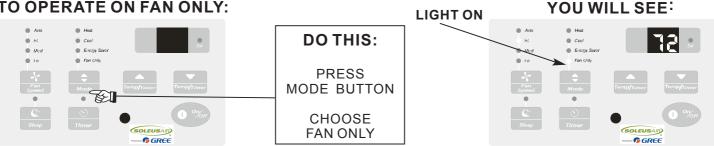




Note: AUTO fan speed automatically sets the speed to provide optimum comfort according to the room temperature. If the room needs more cooling, the fan speed will automatically increase. If the room needs less cooling, the fan speed will automatically decrease. Auto fan speed cannot be used when in the Fan Only mode.

(continued)

TO OPERATE ON FAN ONLY:



Note: Use this function only when cooling is not desired but room air circulation is needed. You can choose any fan speed you prefer, EXCEPT AUTO FAN. During this function, the display will show the current room temperature, not the set temperature.

TO USE THE **ENERGY SAVER FEATURE:**

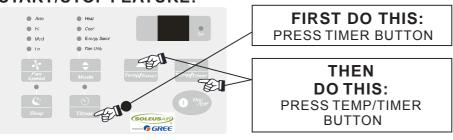


YOU WILL SEE: **LIGHT ON**



Note: In this mode, the fan will continue to run for a short time after the compressor cycles off.

TIMER-DELAY START/STOP FEATURE:



Note 1: For Auto Off, the unit must be in the ON position.

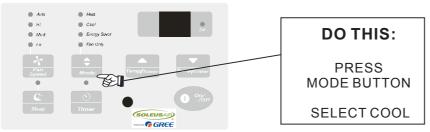
Note 2: For Auto On, the unit must be in the OFF position.

YOU WILL SEE THE TIME CHOSEN:



To adjust timer setting, tap or hold the UP arrow (^) or DOWN arrow (v) to change the delay time by 0.5 hour increments up to 10 hours, then by 1 hour increments up to 24 hours. The unit will count down the time remaining until start (8, 7.5, 7, etc.). After setting the Timer, the unit will enter into Timer mode after 5 seconds, and the Timer light will turn on. In Timer mode: The set temp and fan speeds will be saved; The LED displays the set temperature, not the current room temperature. Press the Timer once, and the LED will display remaining time of set time, LED return to set temperature by 5 seconds; When in Fan Only mode, LED will display the room temperature, not display set temperature. Turning the unit "ON" or "OFF" will cancel the Auto ON/OFF function. The Auto ON/OFF feature will work until the unit either starts or stops. Once this happens the timer will need to be reset.

COOLING FEATURE (on some models):



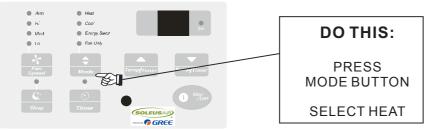
YOU WILL SEE:



Note: This feature can be used with any combination of FAN Speeds, Timer, or Sleep Modes. When in the "Cool" Mode, the fan will run continuously when cooling is needed. The temperature will automatically be maintained anywhere between 61°F (16°C) and 86°F (30°C). When the set room temperature is reached, the fan will cycle off and on to circulate and sample the room air. If the air conditioner is off and is then turned on while set to a Cool setting or if turned from a fan setting to a Cool setting, it may take approximately 3 minutes for the compressor to start and cooling to begin.

(continued)

HEATING FEATURE (on some models):

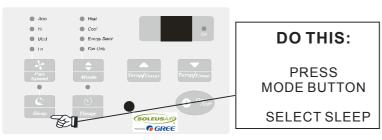


YOU WILL SEE:



Note: This feature can be used with any combination of FAN Speeds, Timer, or Sleep Modes. When in the "Heat" Mode, the fan will run continuously while heat is needed. The temperature will automatically be maintained anywhere between 61°F (16°C) and 86°F (30°C). When the set room temperature is reached, the fan will cycle off and on to circulate and sample the room air.

SLEEP FEATURE:



YOU WILL SEE:



Note: Press this button, Sleep On and Sleep Off can be selected. When the unit is on, Sleep Off is defaulted. After the unit is shut off, the Sleep function is canceled. If the unit is in Cool or Energy Saver Modes, and the Sleep Mode is set, the SET TEMP. will increase 2*F in 1 hour and 4*F in 2 hours. If the unit is in Heat Mode, and Sleep Mode is set, the SET TEMP. would decrease 2*F in 1 hour and 4*F in 2 hours.

TO TURN UNIT OFF:



YOU WILL SEE:



FAULT CODES



If the display reads "F1" a sensor has failed.



If the display reads "F4" a sensor has failed.

Anno
Hat

Cccl
Hed
Every Sacr
10
For Only

Tomp/timer

Tomp/timer

Sleep

Timer

SoleUSAIP

SoleUSAIP

For Only

If the display reads "F2" a sensor has failed.



If the display reads "FJ" a sensor has failed.

ADDITIONAL THINGS YOU SHOULD KNOW

Now that you have mastered the operating procedure, here are more features in your control that you should know.

The Remote Control will operate all the control panel features, follow the same instructions.



The "Cool "circuit has an automatic 3 minute time delayed start if the unit is turned off and on quickly. This prevents overheating of the compressor and possible circuit breaker tripping. The fan will continue to run during this time.



- The control will maintain any set temperature between 60F and 90F degrees (cooling), 55F and 80F (heating).
- The control is capable of displaying temperature in degrees Fahrenheit or degrees Celsius. To convert from one to the other, press and hold the Up and Down Temperature Selection Pads at the same time for 3 seconds.

COMPRESSOR

The compressor is hermetically sealed, permanently lubricated and requires no additional oiling.

FRONT PANEL AND GRILLE

The front panel and grille can be cleaned with a mild soap or detergent. Do not use hydrocarbon-based cleaners (e.g. acetone, benzene, naphtha, gasoline, etc.) to clean the front WATER TRICKLING SOUNDS panel or grille. Use care when cleaning the control areaDo not use an excessively wet cleaning cloth.

SCHEDULED MAINTENANCE

To achieve continuing top performance and high efficiency, a regular cleaning/inspection schedule must be established. Maintaining this schedule can be accomplished by either a local maintenance staff or an authorized servicer and must follow the instructions described in this manual.

- If the unit is operated in a dusty climate, dust may collect in the basepan and clog the condenser coil. It is advisable to remove the unit from the sleeve and thoroughly clean the basepan and condenser coil on a periodic basis.
- If the unit is installed ocean side or in a corrosive atmosphere, its life may be greatly reduced by the corrosive environment. Under these conditions, the unit should be removed from the sleeve and completely cleaned once a year. At that time any scratches or blisters on the painted surfaces should be sanded and repainted.

OUTDOOR COIL CLEANING

The coils on the outdoor side of the air conditioner should be checked regularly. For cleaning outside coil, remove the 6 screws that mount the condenser coil top cover to condenser shroud.



Normal Operating Sounds and Conditions

POPPING OR GURGLING SOUNDS

This sound is the refrigerant traveling through the lines. This is a normal sound which may be heard for a few seconds after the unit shuts off.

This sound is produced by the water as it is picked up and run over the coils. This procedure improves the efficiency of the unit and helps with water removal.

WATER DRIPPING

Water will collect in the basepan during high humidity days.

STARTING DELAY

You may notice a short delay in the startup if you try to restart the unit too soon after turning it off or if you adjust the thermostat right after the compressor has shut off. This delay protects the compressor.

Obtaining Service

In the unlikely event this unit requires repair or servicing beyond what is covered in this manual, contact an authorized service organization.

To obtain an authorized servicer, contact your sales representative or agency.

WARRANTY

One Year Limited Warranty

Soleus International, Inc. warrants the accompanying Soleus Air Powered by Gree Air Conditioner to be free of defects in material and workmanship for the applications specified in its operation instruction for a period of ONE (1) year from the date of original retail purchase in the United States.

If the unit exhibits a defect in normal use, Soleus International will, at its option, either repair or replace it, free of charge within a reasonable time after the unit is returned during the warranty period.

As a condition to any warranty service obligation, the consumer must present this Warranty Certificate along with a copy of the original purchase invoice.

THIS WARRANTY DOES NOT COVER:

- Damage, accidental or otherwise, to the unit while in the possession of a consumer not caused by a defect in material or workmanship.
- Damage caused by consumer misuse, tampering, or failure to follow the care and special handling provisions in the instructions.
- Damage to the finish of the case, or other appearance parts caused by wear.
- Damage caused by repairs or alterations of the unit by anyone other than those authorized by Soleus International Inc.
- Freight and Insurance cost for the warranty service.
- Filter and Accessories

ALL WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANT ABILITY ARE LIMITED TO ONE-YEAR DURATION OF THIS EXPRESS LIMITED WARRANTY. **SOLEUS INTERNATIONAL INC.** DISCLAIMS ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES AND IN NO EVENT SHALL SOLEUS INTERNATIONAL INC'S LIABILITY EXCEED THE RETAIL VALUE OF THE UNIT FOR BREACH OF ANY WRITTEN OR IMPLIED WARRANTY WITH RESPECT TO THIS UNIT.

This warranty covers only new products purchased from our authorized dealers or retailers. It does not cover used, salvaged, or refurbished products.

As some states do not allow the limitation or exclusion of incidental or consequential damages, or do not allow limitation on implied warranties, the above limitations and exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

For Technical Support and Warranty Service

Please Call (888) 876-5387

Or Write To: Soleus International, Inc. 20035 E. Walnut Dr. N. City of Industry, CA 91789 www.soleusair.com www.soleusgreen.com www.greeusa.com